FRANCES-TETONKA LAKES OVERSIGHT COMMITTEE MEETING
WATERVILLE FISHERIES HEADQUARTERS
21 JULY 1986

Present: Brian Smith, Sanitarian, Le Sueur County
Steve Heiskary, Water Quality Division, MPCA
Henry Quade, Biology Professor, MSU, representing Tetonka Lake Association
Dirk Peterson, Waterville Fisheries Supervisor, MDNR

Absent: Joseph Shapiro, Biology Professor, U of M, representing the Frances Lake Association

Meeting opened with discussion concerning the July 3, 1986, letter from Chuck Dayton and the stipulation agreement noting the limits of this committee's authority. H. Quade, representing the Tetonka Lake Association, noted that on page two of the stipulation agreement it states in point number 1: "The committee chairman, a representative of the Department of Natural Resources, will immediately convene a meeting of the committee." "I feel it is unfortunate that the Lake Francis Area Association representative is unable to attend meetings." S. Heiskary noted that PCA favors neither Lake Tetonka or Lake Frances; D. Peterson noted that Fisheries would be impartial. H. Quade stated that at present there is no lawsuit against the PCA or DNR. He will report to the Tetonka Lake Association that the government agencies involved have acted in good faith. H. Quade stated the committee has two functions: set up the monitoring system and then look at the data.

D. Peterson, chairperson of the committee, stated that the oversight committee will reach a consensus on how these two stipulations (algal enrichment - bioassay) will be handled, and it will be his responsibility to call J. Shapiro and get his approval or disapproval and then get back to the other members of the oversight committee present. He will also approve minutes of this meeting and send copies to major counsel and committee members.

Algal Enrichment

Regarding item number four on the Eutrophication Study, H. Quade recommended an enrichment study instead of a cause and effect study - he preferred not to use introduced algae - he felt that relative changes were more important than absolute changes. H. Quade felt key issues were separating samples from ditch and from the Cannon River and the relative proportions of input should be calculated following mixing. A major concern would be to measure the flow at each sample site.

H. Quade felt there were 3 options for sample testing: 1) MN Valley Testing (they have never done it); 2) Barr Engineering, Minneapolis - Hal Runke, limnologist; and 3) Bob Glazer, Ecological Services, Senior Chemist at the chemistry lab at Carlos Avery. D. Peterson informed the committee of the $3,000 budget limitation and that contracting with Bob Glazer would help in staying within those guidelines.

The following methods for the algal enrichment study were outlined by the oversight committee:

1. Series of one liter flasks up to ten flasks with an ultimate of 250 ml. of water capped with cotton balls (ensures enough air in liter flask).

2. Testing would be required to determine the amount of innoculation the first time around; i.e., that could be 10, 20, 30% - we just don't know.

3. Want water in flask to be a greenish but not too greenish in color.

4. These cultures are to be placed under cool fluorescent lights located at approximately one and one-half feet above the algae for one week (seven days).

5. There will have to be multiple flasks (5 - 10) for the Cannon River control, County ditch Hwy. 14 for statistical purposes.

6. Simultaneous flow measurement at the site of collection at Cannon River and ditch required.

7. Lake innoculant sampling must take into consideration wind related surface algae distribution.

8. Determination of productivity to be done by any two methods from the following: 1) algae enumeration, 2) algae bio mass, 3) chlorophylla. H. Quade indicated 3) plus either 1) or 2). D. Peterson noted that 10-15% will be considered significant interpretation, which Bob Glazer, Ecological Services, or a contractor, would do.

9. Determine differences in productivity by lab - analyze and present statistical assessment differences in productivity and support them as soon as possible in written form to the chairperson.

   D. Peterson noted samples would be taken in July, August, and September - during the last week of each month - this would then be a standardized time to take samples. The June sample will be done in 1987 although it's too late for the June 1986 sample.

The committee suggested that outside the agreement, TKN and TP testing by the DNR chemistry lab or a contractor in addition to those outlined in the agreement. H. Quade requested that we provide two more samples for TKN and TP at 1) outlet of Lake Frances and 2) outlet of Lake Tustin. All members of the committee found this acceptable. D. Peterson said the DNR would have to absorb the hidden costs internally to stay within budget. Committee members accepted Bob Glazer and the Carlos Avery lab or a contractor for sample testing.

good.

In selection of a site for algal innoculant sampling, one should stay away from the two inlets and stay in the middle of the lake. Cannon River site - use bridge that crosses #12. Sample for the lake in Dickinson Flat or per the judgment of the committee chairman. H. Quade stated that the sampling for water should be integrated. This was agreed to by all members.

Bioassay

Bioassay testing would be done once a year prior to May 15th and should begin as soon as possible in 1986 and once next year prior to May 15, 1987. D. Peterson noted that Bob Glazer may not want this section but could contract the bioassay testing out to another firm; agreed by committee to accept Glazer as tester or accept whoever was contracted out by him.

H. Quade stated there are letters on file from people knowing DDT, 2-4-5T, etc., dumped in Tustin - on record at court. S. Heiskary indicated PCA would get involved if high levels are found. B. Smith - take first tests and proceed from there.

No response from PCA to my letter.

Recorded that the two major groups of invertebrates found in the samples be analyzed once per year - agreed by committee.

H. Quade questioned how to sample wildlife management area, sample benthos in ditch and macrophytes in ditch. He feels it is necessary to do testing in the wildlife management area. H. Quade was concerned if seepage occurred 10 or 20 years ago and may now be coming out of the wildlife management area. H. Quade recommended a grid pattern around the dump with emphasis toward the culverts and a sample from the ditch to tell us if historic loading of the wildlife management area has occurred. H. Quade asked if sampling should include Lake Tetonka. S. Heiskary recommended samples from Lake Frances, Lake Tetonka (Antl Bay) and eliminate the ditch site. S. Heiskary noted benthic samples should be as comparable as possible. H. Quade said hot spot would show up with small grid pattern in Tustin.

Consensus of committee members: 1) pattern of bioassay testing in Tustin that grids dump and outlet, 2) Fisheries ditch tested, 3) yardstick background data for Frances and Tetonka (concern of S. Heiskary for background information for PCA). Organic settlement occurs in deeper part of lake for organics and heavy metals; this is where sampling should occur.

B. Smith noted sampling problems and hot spot will be passed on if found; but presently the only documented evidence are statements submitted to the court by the public. H. Quade again stated that Lake Tetonka Association motivation is to involve PCA for testing. B. Smith noted dump will have to be monitored by PCA if hot spots are found. S. Heiskary said Deb. McGovern of PCA will start the initial process or initial investigation by PCA this summer. The collection, sort, extraction process for heavy metals should be completed by the end of this summer for the purpose of finding out if the dump is releasing heavy metals.

Good!

D. Peterson - Fisheries team or Ecological Services would collect samples. Background measurements would be done in case monitoring is required in the future.

D. Peterson recommended PCA do collection. Heiskary said no one at PCA is doing bioassay work; D. Peterson stated he has collected benthos but Ecological Services would be more experienced.

For the minutes - decided that Ecological Services would do collection staff work with D. Peterson's staff. S. Heiskary again noted that types of organisms should be common.

Decided by committee on where to do bioassay tests:

1. East bay of Lake Frances.

2. Grid pattern around outlet and in proximity of dump - 5-10 samples.

3. Lake Tetonka - Antl Bay.

4. Fisheries ditch - within boundaries of DNR-Fisheries station.

The two most abundant arthopods would be analyzed.

Glazer to do extractions and tests - or to whoever he decides to contract for testing.

D. Peterson - sampling will be done as soon as possible - last week of July or the first week of August. H. Quade wants to be notified of exact dates when samples are to be taken.

Water quantity

County engineer and civil defense director both communicate with the committee on water quantity issue - communication should be to D. Peterson and he with other members of the committee. Chairman will write a letter to county engineer and civil defense director regarding items 10, 11, 12 of the stipulation agreement and D. Peterson communicate to committee on said items.

B. Smith - requested D. Peterson to remain involved as perhaps liaison with new chairman.

Noted by Chairman that the committee opted for more sampling than agreement required.

Meeting adjourned.